

WQX User Call

May 22, 2025

There were approximately 48 participants on the call.

Agenda:

1. WQX Project Status Report (15 mins)
 - WQX/WQXWeb performance/updates (Kevin)
 - WQX Helpdesk report (Shay)
 - WQX Tip-of-the-month: Qualifiers
 - Draft at Detection Limit
 - WQX questions/comments
2. WQP Status Report (15 mins)
 - WQP General Status Report
 - User Feedback requests
 - WQP questions/comments
3. DEMO: New spatial tools in TADA to relate ATTAINS AUs and WQP locations (Cristina)
4. Open Discussion
 - Other topics/questions

Notes:

1. **WQX Project Status Report**
 - a. WQX Performance/Updates (Kevin Christian)

All WQX and WQX Web services are available ONLINE with NO interruptions this past month.

- Reminder - In the event of a interruption of services: A Notice and Alert will be posted to both the WQX Web application and emailed to the "STORET" WQX Listserver
- QAQC Review of data submissions for sample start dates before "01-01-1940":
 - Data 1 on 1 assistance is available for data owners to request assistance updating any Activity Start Dates before "01-01-1940"
 - Please Email [wxq@epa.gov](mailto:wqx@epa.gov)
- User Community has shared example RSTUDIO coding to perform data submissions via WQX Web API services
- Current Sprint#2 In Progress, planned release to Production by September 2025

- Improved documentation for API services
- Improved documentation for Getting Started WQX Web
- WQX-213 Create new API services “project” Monitoring Location and Result to Review data details in WQX
- WQX-264 Create a new API service to Retrieve Binary Attached Objects For Projects, Monitoring Locations, Activities, and Results
- WQX-265 Populate Binary Attached Object Info in the Review Exports to download associated files for Projects, Monitoring Locations, Activities, and Results
- WQX-275 Result Review Export Add Taxon Parent Name And Rank
- WQX-156 Improve Exporting in WQX Web
- WQX-271 Enhance Review Projects Export To Excel, WQX-272 Enhance Review Monitoring Locations Export To Excel, WQX-273 Enhance Review Activities Export To Excel, WQX-274 Enhance Review Results Export To Excel
- WQX-13 Remove Deprecated Sample Collection and Sample Preparation Methods From Activity Table
- 508 Compliance Issue Resolution
- WQX-101 Batch Delete Index and metric Types
- WQX-278 Batch Update Identifiers For Metric Types And Index Types

b. WQX Helpdesk report (Shay Torres)

Over the last month there were 237 tickets received.

- New user requests - ~22%
- WQP Inquiries - 32%
- Data assistance - ~17%
- New domain requests - ~18%
- General inquiries - ~11%

Implemented better tracking on tickets. Continuing to develop new user guidance.

Coming soon: API service documentation, Detection Limit Guidance, High-frequency Time-Series Guidance, Periphyton/Phytoplankton Guidance

c. WQX tip-of-the-month – Qualifiers

WQX updated the way it handled Qualifiers in the 3.0 update, from a single field, to supporting one-to-many qualifiers per record. At the time, existing Qualifiers, many of which had become multiple qualifier IDs, were marked deprecated and were moved to a list of individual qualifiers.

Example from deprecated table:

Result Measure	9 BJ	B J; Detected in blank. Estimated value
Result Measure	403 BJG	Analyte found in sample and associated blank, the reported result is an estimate (the value is less
Result Measure	211 BJHQC	Estimated value, compound also detected in LRB, holding time exceeded, QC problems

On the WQX domain service webpage, you will find both lists of Qualifiers.

- [ResultMeasureQualifier \(ZIP\)](#) | [\(XML\)](#) | [\(CSV\)](#)
- [ResultMeasureQualifierDEPRECATED \(ZIP\)](#) | [\(XML\)](#) | [\(CSV\)](#)

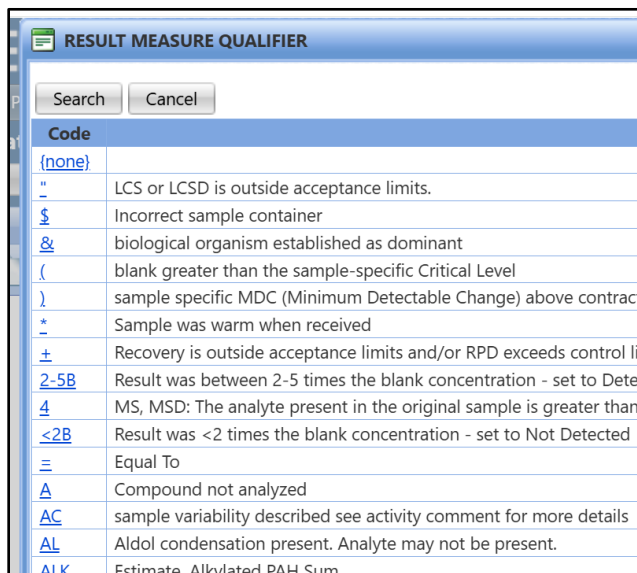
Since WQX is backward compatible, you will find that both still validate, as seen in the WQXWeb available list of qualifiers within the import configuration module. However, multiple qualifier IDs in the deprecated table are now translated and split into the many-to-one qualifiers listed in the current Qualifier domain table.

d. Detection Limit Guidance

Draft available for review on the WQX Training Resources Sharepoint Site (Requires access request).

[WQX/WQP Training Resources - Home](#)

[e, WQX - Comments/Questions](#)



RESULT MEASURE QUALIFIER	
Search Cancel	
Code	
(none)	
-	LCS or LCSD is outside acceptance limits.
\$	Incorrect sample container
&	biological organism established as dominant
(	blank greater than the sample-specific Critical Level
)	sample specific MDC (Minimum Detectable Change) above contract
*	Sample was warm when received
±	Recovery is outside acceptance limits and/or RPD exceeds control li
2-5B	Result was between 2-5 times the blank concentration - set to Dete
4	MS, MSD: The analyte present in the original sample is greater than
<2B	Result was <2 times the blank concentration - set to Not Detected
=	Equal To
A	Compound not analyzed
AC	sample variability described see activity comment for more details
AL	Aldol condensation present. Analyte may not be present.
ALK	Estimate. Alkylated PAH Sum

2. WQP Status Report (Candice and Lee)

A lot of progress has been made to repair the Beta service, seeing more successful queries. On Monday, they will change the banner back to suggest using and testing Beta. So once again, continue to troubleshoot and share any reports with the Helpdesk WQX@epa.gov.

There will be a database tweak tomorrow that could cause an outage on the Friday the 23rd but hopefully resulting in increased performance over the weekend.

New blog post on using WQX data translate from tall to wide format to 'tidy' or multivariate analysis:

<https://waterdata.usgs.gov/blog/long-to-wide/>

3. DEMO - TADA Spatial Tools to relate ATTAINS AUs and WQP Sites (Cristina)

*TADA still runs on WQX2, plans to update to WQX3 once beta is stable

Recent TADA Updates:

The Radical Open Science Syndicate (ROSS) at Colorado State University recently collaborated with the EPA on its development of the Tools for Automated Data Analysis (EPATADA) R package, which helps States, Tribal Nations and other stakeholders more efficiently compile and evaluate Water Quality Portal (WQP) data. Through this collaboration with the Internet of Water, ROSS help us develop powerful new geospatial functions and optimized data retrieval methods for the package—enhancing EPATADA's already powerful water quality analysis tools.

Summary:

- Query the WQP using sf objects [or tribal info]
- Convert WQP data into sf objects
- Associate WQP monitoring locations with ATTAINS assessment units

Details:

- ATTAINS related functions:
 - [TADA GetATTAINS\(\)](#)
 - [TADA ViewATTAINS\(\)](#)
- [TADA DataRetrieval\(\)](#) updates:
 - new aoi_sf option
 - new tribal_area_type/tribe_name_parcel option
 - handling of big data queries through this function instead of TADA_BigDataRetrieval
 - quality of life changes (progress bars, download confirmation, message handling)
- [TADA TribalOptions\(\)](#) function

- [TADA MakeSpatial\(\)](#) function

Vignette (Rmd): <https://usepa.github.io/EPATADA/articles/TADAModule2.html> (code: <https://github.com/USEPA/EPATADA/blob/develop/vignettes/TADAModule2.Rmd>)

EPATADA Additions Webinar Link: <https://youtu.be/7zzdGo58dvA?si=dmqwGQy6KLSsAKe7>

4. Open Discussion/ Other/ Wrap-up

Our next WQX/WQP User call will be **Thursday 6/26/2025 @ 12 EST**.

WQX Data Assistance

EPA WQX offers you a single point of contact to assist you with any questions or needs for your data submission and retrieval. We are here to help you succeed! For custom support, please request an appointment for individual assistance with a WQX data advisor.

What is "1 on 1" data assistance?

- We provide individualized, in-depth assistance to partners and programs conducting individual or group data monitoring.
- A WQX data advisor will schedule a meeting with you based on your best availability to help you with your project/assignment.
- Open to all WQX/WQP Web users.
- Sessions can last from 15 minutes to 1 hour.
- Sessions can be scheduled within the weekday hours of 8am to 7pm EST by appointment.
- If you had a "1 on 1" session, you may also request follow-up assistance via email to WQX Helpdesk ([wxq@epa.gov](mailto:wqx@epa.gov)).
- If you have a basic question, a faster way to get an answer is to chat with us.

To speak with a WQX representative, please call **800-424-9067** ([wxq@epa.gov](mailto:wqx@epa.gov)).